

Amendments to the Claims:

Please amend claims 4-6 and 18, and cancel claims 19-23. This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-3. (Canceled)

4. (Currently Amended) A method for culturing neural stem cells comprising the step of culturing a neural stem cell or a population of neural stem cells comprising at least one neural stem cell in [[the]] a growth medium comprising 1 ng/ml to 1 mg/ml of supplemented with a combination of growth factors consisting of hepatocyte growth factor (HGF) and fibroblast growth factor-2 (FGF-2).

5. (Currently Amended) A method for proliferating neural stem cells comprising the step of culturing a neural stem cell or a population of neural stem cells comprising at least one neural stem cell in [[the]] a growth medium comprising 1 ng/ml to 1 mg/ml of supplemented with a combination of growth factors consisting of hepatocyte growth factor (HGF) and fibroblast growth factor-2 (FGF-2).

6. (Currently Amended) A method for differentiating neural stem cells into a population of cells containing neurons and glia cells comprising the step of culturing differentiating in cell culture a neural stem cell or a population of neural stem cells comprising at least one neural stem cell in [[the]] a growth medium comprising 1 ng/ml to 1 mg/ml of supplemented with a combination of growth factors consisting of hepatocyte growth factor (HGF) and fibroblast growth factor-2 (FGF-2) under conditions that allow the differentiation of the neural stem cell into a population of cells containing neurons and glia cells.

7. (Original) The method of any one of claims 4 to 6, wherein the neural stem cell is derived from mammalian neural tissue selected from the group consisting of brainstem, cerebellum, cerebral cortex, midbrain, spinal cord and ventricular.

8. (Previously Presented) The method of any one of claims 4 to 6, wherein the neural stem cell is genetically modified.

9-14. (Canceled)

15. (Previously Presented) The method of any one of claims 4-6, wherein the growth medium comprises 1 ng/ml to 100 ng/ml of HGF and FGF-2.

16. (Previously Presented) The method of any one of claims 4-6, wherein the growth medium comprises 1 ng/ml to 20 ng/ml of HGF and FGF-2.

17. (Previously Presented) The method of any one of claims 4-6, wherein the HGF and FGF-2 are maintained in equal concentrations in the growth medium.

18. (Previously Presented) The method of any one of claims 4-6 claim 6, wherein the majority of the population of cells are neurons wherein the population of cells differentiated from the neural stem cell comprises more neurons than glia cells.

19-23. (Canceled)